Elementix® is an innovative range of clay rainscreen cladding systems developed to offer an unrivalled choice in façade finishes.

Elementix® Express is a cost effective and quick to build system in a range of the most popular size formats, natural clay colours and surface finishes.

Elementix® Freedom removes the design constraints of standard panel formats allowing sizes to be specified to suit the building. In addition Elementix® Freedom has exceptional sustainability credentials.

Elementix® Colour offers a virtually unlimited palette of ceramic glazed finishes to make every project unique.

For more information visit www.ibstock.com
imported products can be created by blending their bricks. If you can’t see the stock brick you require in the Leicester brochure, then perhaps a bespoke blend will meet your requirements. This is primarily because they are blended products. It is often difficult to match or offer a close alternative. With products coming in from the continent, whatever blend that suits your requirements.

Create your own Brick Blends

A new brochure featuring the bricks from the Leicester factory is now available. A special feature is that the Leicester factory now offers any of its products in freestanding / boundary wall construction. Ground level for manhole construction and as DPCs. A Class “B” engineering brick would typically be used below ground level for manhole construction and at DPCs in freestanding / boundary wall construction.

Oxford Brookes University Study Tour of post-industrial Detroit

Harriet Harriss, Design Studio Leader

Diploma students in the Department of Architecture at Oxford Brookes University undertook a one-week study trip to Detroit in Michigan, USA in January 2010. Supported by Ibstock, the study trip involved a range of contrasting activities including tours of architectural gems within the largely derelict downtown, visits to the abandoned Ford factory and a design collaboration with masters architecture students at the University of Detroit Michigan, during which time the students developed Detroit-based innovative architectural solutions.

BDA Brick Awards 2010

The annual Brick Awards recognise excellence in design, aesthetics and construction using brick. Now in their 33rd year the BDA Brick Awards are one of the most widely respected design awards in the UK and entry forms are now available. Anyone can enter the awards – architects/designers, owners, developers, house-builders, specialist brickwork contractors and brick manufacturers – this year’s closing date is 25 June. An entry form can be downloaded by visiting www.brick.org.uk/_media/_pdf/2010-entry-form.pdf

FAQ with the Design/Technical Team

Our Design and Technical Teams field lots of questions daily, so we asked them what were the most frequently asked. We start with Michael Thomson - Ibstock’s Design Advisor for Scotland and Ireland. He has been with Ibstock for over 5 years and prior to that was project leader for a number of architects’ practices in and around Glasgow. Michael greatly enjoys answering the variety of the questions he is asked.

I am often asked about “engineering bricks” which, more often than not, what is meant is smooth extruded / wirecut bricks. Engineering bricks are classified into two types in BS EN 771-1: Class “A” & Class “B” which are required to have the following minimum qualities;

<table>
<thead>
<tr>
<th>Type</th>
<th>Compressive Strength</th>
<th>Water Absorption</th>
<th>Durability</th>
<th>Soluble Salts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class “A”</td>
<td>125N/mm²</td>
<td>≤4%</td>
<td>F2</td>
<td>S2</td>
</tr>
<tr>
<td>Class “B”</td>
<td>75N/mm²</td>
<td>≤7%</td>
<td>F2</td>
<td>S2</td>
</tr>
</tbody>
</table>

There is no requirement in the BS for the colour or face finish of these bricks which can be red through to blue in colour and may have sizeable chipping or blemishes on the faces.

Ibstock do however have a number of facing bricks which include all of the Class “B” engineering characteristics as well as being quality facings bricks. Our glazed bricks have Class “A” technical properties which coupled with their great appearance makes them the “Rolls Royce” of bricks.
Wm Morrison Superstore, Willenhall

Brick Types: Green & Olive Green Glazed, Priory Weathered Red
Architect: WCEC Architects

The new Wm Morrison’s Superstore is sited adjacent to the existing town centre of Willenhall and has been designed to expand the town’s existing shopping area and stimulate regeneration of the surrounding areas.

The design of the Superstore was influenced by the vernacular architecture of both the Victorian era and more recent Industrial additions which contain a number of subtle ‘art deco’ influences. Combined with more contemporary design cues, the building has developed into four distinctive elevations, although common themes/elements are evident throughout.

The gently rounded corners, created using radius glazed bricks, echo the local art deco design influences whilst also providing a smooth and very tactile surface which enables the building to sit comfortably in its surroundings.

The inclusion of the bold, striking green glazed brick entrance features create a strong and individual identity, enhancing the sense of place and local identity. The green colour of the glaze was chosen as it’s a close reflection of Morrisons corporate green used in their store signage.

“The gently rounded corners echo the local art deco design influences”
Collective Architecture worked in close association with Sanctuary Scotland Housing Association on this important redevelopment to improve the quality of life for the residents of Linwood.

The existing and problematic multi-storey maisonettes are being demolished on seven different sites scattered around Linwood making way for 190 low density family houses. Individuality is brought to each home through the use of multi-coloured facades using standard bricks in blue, buff and red bricks together with glazed bricks, thus creating a varied streetscape.

The glazed banding detail is simple to install (see Back to Basics at the end of this issue) and the use of a pale mortar highlights the colour of the glazed bricks.

Brick was chosen as a low maintenance finish providing an easier option for long term cost compared to a render finish.

The new homes aim to bridge the gap between private and social housing by setting standards which will be enjoyed by all. The project is currently on site and will be completed later this year.

"Individuality is brought to each home through the use of various coloured glazed bricks."
Milton Keynes Academy is the first of the new Academies Framework schemes to open its door to students. The academy for 1,550 11 to 18 year olds, specialises in business enterprise, and replaces the Sir Frank Markham Community College.

All practical and vocational space of the three-storey school is on the ground floor, and is visible from the welcoming entrance space which is part of the central hub. Three blocks radiate from this hub accommodating the Art & Design Technology, Science, and Drama & Music departments each with access to their own garden and, for the latter, an outdoor performance space. Other teaching space above is arranged into five separate year-based villages, each a self supporting unit with its own facilities. A large proportion of the building is open-plan with the aim of promoting self-directed learning and a greater mix of small group activities.

Black bricks were chosen as the main material for the building to create an impact and they help focus the attention on the ‘hub’ building. They also make the perfect backdrop for the other materials that have been used - white render, glass and steel.

There is a strong community aspect to the new academy allowing members of the public use of the facilities. The academy is the first school in the country to have a Business-in-Residence, where free office space is given in the Business and Enterprise Hub in return for four hours a week working with the students on projects and mentoring. This hub has been designed and furnished in a manner akin to commercial office space.

The academy is naturally ventilated and daylit and has achieved a Very Good BREEAM rating. The academy is also the first to be granted 60% Carbon Reduction funding.

“This hub has been designed and furnished in a manner akin to commercial office space.”
Wotton Lawn Hospital is an 84 bed Acute Mental Health Hospital situated near the centre of Gloucester and provides in-patient services for the county of Gloucestershire.

The scale of the new PICU was carefully considered to take into account the existing hospital buildings and the landscape setting. The overall size of the building, internally and externally has been designed to give a non-institutional feel to the unit. The main entrance is emphasised by a low canopy. There is also a low canopy on the garden side to provide shelter, and create a gathering place.

The scale of the elevations is moderated through the use of a variety of materials and window styles with different sill heights. In rooms where patients will be sitting it is important that sill heights are lower in order to allow unrestricted views outside. The style of the windows, with a vertical emphasis adds height to the single storey building form.

Elementix® Colour rainscreen cladding in modules of 440 x 215mm has been used to reduce the apparent height of the building. Copper as a cladding has been chosen to harmonise with the copper on the roof. The copper colour in the Elementix® Colour range is unique in that it is not a uniform or monotone colour but introduces a range of tones across the tile. The feature projecting bays in prominent elevations break up the facade and add interest. This is also inherent through the shape of plan, with its angles and curves.

"The choice of materials has been carefully considered in light of the building’s location."

The intention was to create a contemporary, inviting environment, which will be stimulating and practical for the care of patients, with mental health problems, and conforms to current Department of Health standards. Elementix® was suitable for this application because it has been tested by CRAM for use down to ground level and if a tile did become damaged it is quick and easy to replace a single tile.

The site is located in a restricted corner, over-shadowed by mature, protected trees. The choice of materials was carefully considered in light of the building's location, where debris will be dropped by trees, particularly the sap from the lime trees which will attract dirt. Smooth finishes to the elevations facing the trees allow some self cleaning by rain (similar to glazed bricks found on Victorian pubs). Copper has traditionally been used for civic buildings in urban/polluted environments and will weather naturally over time.
Library Extension,
Foleshill Library,
Coventry

Brick Types: Throckley Smooth Buff, London White, Yellow, Blue, Lime and Aquamarine Glazed
Architect: Rush Davis

Coventry’s newest library extension at Foleshill Library was officially opened by the Lord Mayor, Councillor Andy Matchet on Tuesday 2 December 2009. The original library was built around 1900 and it is set in a residential area of the city. The extension provides much needed space in a vibrant and exciting way.

Brief: The architect was asked to provide an extension to the existing library at the rear of the building that would give staff some office and ancillary space.

Design: When the architect visited the site (which is triangular in shape) the library was packed. The surrounding community is vibrant, multi-cultural and busily uses the library.

The design reflected this vibrancy – with multi-coloured bricks vertically stack-bonded to represent books and the multi-cultural nature of the community. These were utilised for the entire curved back wall which is radiused from the pointed end of the triangle. Bed joint reinforcement was used to provide structural integrity for the stack bonding and standard glazed bricks form the concave curve.

The design was to use the bricks in a random manner and the idea of using Morse code as a method of laying out the bricks was developed. One brick represented a dot and three same coloured bricks represented a dash.

The words used represented the idea of what libraries are about – imagination. So repeated five times throughout the back wall are the words

Supposing
I wonder, and
What if?

It was important that the words had a meaning rather than just be random ramblings and it is all these elements that make the whole building more than just coloured bricks.

The library staff love it and it has been very well received by the local community. Head of Libraries for Coventry City Council, Andrew Green, commenting on the scheme said, “The new extension provides improved access for disabled people, opens up the rear of the building and provides a better layout of stock, as well as adding a small meeting room and enhancing the inadequate staff facilities. New public access computers have recently been installed and it is hoped to hold library events in the garden area at the rear of the library in the future.”
Inspirations

HEIRITAGE MUSEUM, NORTH LANARKSHIRE  | ETURIA MIXTURE, THROCKLEY SMOOTH BUFF

6TH FORM COLLEGE, WANDSWORTH  | HAREWOOD RUSSET BUFF

PRIVATE APARTMENT REFURBISHMENT  | BETSPORE ALBANY CREAM IMPERIAL

LAW COURTS, NUNEATON  | CHEDDAR BEIGE, OUTDOOR GOLDFINCH

HERITAGE MUSEUM, NORTH LANARKSHIRE  | ETURIA MIXTURE, THROCKLEY SMOOTH BUFF

APARTMENTS, ALDRIDGE, W MIDLANDS  | BLUE TILEBRICK

SOCIAL HOUSING, PECKHAM, LONDON  | ROYSTON CREAM

OLYMPIC VILLAGE SUBSTATION, STRATFORD, LONDON  | HIRLEYS EBONY BLACK
**Back to Basics**

*Design Detailing*

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**Dogtooth Courses**

Dogtooth courses are produced when a course of cut bricks are laid at 45° to the main face of the wall to produce a projecting triangular face.

There are two types of dogtooth course: in one, each arris projects beyond the main face of the wall, typically above a corbel and in the other, the arrises sit flush with the main face of the wall. In both applications solid bricks will be required. For speed of construction on site these can be factory pre-fabricated as Brickwork Components.

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**Quoins**

Brickwork quoins are often expressed by projecting bricks or by highlighting the quoins with a contrasting colour or material.

Where projecting brick quoins are used, consideration needs to be given to maintaining a consistent bond, as the width of the quoin will be greater than if the detail was constructed from flush bricks. As bricks are generally not faced on the bed and top faces, BD 1.3 special bricks should be used at the top and bottom courses of projecting quoins. Ibstock can also provide factory produced quoins as part of the Brickwork Components range.

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**String Courses**

A string course is a decorative course of brickwork where the bricks project slightly beyond the main face of the wall. They can incorporate bricks of a contrasting colour, special shape, relief panels and a variety of textured effects such as dogtooth etc.

Special consideration should be given to perforations or frogs which may be exposed to view and the weather, in which case solid bricks should be specified.

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**Band Courses**

A band course is a decorative course of brickwork where the bricks sit flush with the main face of the wall, typically constructed with bricks of a contrasting colour or bond to the main facing bricks.

Bricks supplied for band courses may have a different average length from other bricks in the wall. Generally, set out all courses to the co-ordinating dimensions of the bricks (225mm for standard bricks in stretcher bond) by tightening or opening vertical joints as necessary and plumbing every fourth or fifth perpend. If a satisfactory result still cannot be achieved, a matching mortar colour can be used to reduce the visual impact of the misaligned perpends. Where colour contrasts are specified in band courses, differential movement may occur due to both differential heat gain and long-term moisture expansion. In such circumstances, bed joint reinforcement should be considered between the different coloured courses. Stack bonding to produce a soldier course is one of the most popular decorative band courses.

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**Polychromatic Brickwork**

Polychromatic brickwork is built from bricks of different colours in decorative features ranging from simple band courses of contrasting colour to complex patterns or murals.

Coloured mortars may be used to match or contrast with the bricks and again factory made versions are available as part of the Brickwork Components range.

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**Dentil Courses**

A dentil course consists of a regular pattern of projecting headers (formed from cut solid faced on bed BD.1.3) cut to project.

In cavity walls, the cut is flush with the inner face of the outer leaf. The feature is finished with a course of solid stretchers laid centrally over the headers either flush or projecting. The projecting headers should be placed to avoid a straight joint with the course below. Bulbous or Plinth Headers can also be used to vary the design. Ibstock produce factory made dentil courses as part of the Brickwork Components range, where brick slips of various depths are bonded to concrete block backings. These have the advantage of significantly increasing construction speed and reducing the requirement of specialist skills.